

ABSTRACT OF THE DISCLOSURE

The present invention relates to
fractionation improvements. Thus, in a
5 fractionator having a fractionation vessel, a
reactor effluent vapors inlet, a vapor feed
contacting zone, a baffled contacting section
above the vapor feed contacting zone, a tops
section above the baffled contacting section, a
10 heavy bottoms liquid hold-up pool section below
the vapor feed contacting zone, a bottoms outlet,
a bottoms recycle system with a heat exchanger
with recycled, cooled bottoms fed back to the
fractionation vessel at the heavy bottoms liquid
15 hold-up pool section and above the vapor feed
contacting zone, the improvements involve a
separate remotely located bottoms liquid hold-up
pool vessel for separating bottoms liquid holdup
from vapor within the fractionation vessel to
20 obtain a thermal separation and increased
fractionation efficiency. The invention also
relates to fractionation processes utilizing the
aforesaid improvements.